

Marquette-ISM Report on Manufacturing March 2018- Early Release

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Preliminary Version (does not include ISM National Results for March 2018)
*****EMBARGOED until 9 a.m. Eastern*****

*The Marquette-ISM Report on Manufacturing was prepared by **Gwendolyn Davis**, a graduate student in Applied Economics at Marquette University, and distributed by **Melanie Roepke**, Associate Director of the Center for Supply Chain Management.*

Please direct data questions and requests for media commentary to Dr. Fisher.

This report should not be confused with the ISM National Report published by the Institute of Supply Management. While a reasonable attempt has been made to remain consistent with the national report, the contents of this report reflect only information pertinent to the southeast Wisconsin and northern Illinois region. This report is not used in the calculation of the national report.

Summary

Milwaukee-area PMI	March 2018	February 2018	January 2018
Seasonally adjusted	67.80	75.24	63.40

(Milwaukee, Wisconsin) – March's Index registered at 67.8, a decrease from 75.24 in February. March's Index still indicates very positive territory.

What respondents are saying in March 2018:

- Steel & Aluminum tariffs pose significant risk as we will be at a competitive disadvantage to our competition based in Europe. They import finished goods and will not have tariffs, we import specialized raw materials that is not produced in the U.S. so that we can manufacture finished goods in the U.S. This will hurt us because we manufacture in the U.S. and they don't.

- Two issues are facing our supply chain department - increasing prices and increasing lead times. Both seems as though they are long term issues.
- Signs of slowing from some customers, particularly domestic US.
- Quoted jobs are coming to fruition.
- Tariffs will slow domestic production in favor of imported equipment
- Currency markets and government policies are creating uncertainty
- Received notification from steel plate supplier of 40% increase on future orders due to tariff announcement.

Important: See explanatory notes on the survey and diffusion index at the end of this report.

(*) The indices are seasonally adjusted *except for* the Customers' Inventories, Prices, Backlog of Orders, Exports, and Imports Indexes, which do not meet the accepted criteria for seasonal adjustments.

MANUFACTURING AT A GLANCE: March 2018*				
Index	Series	Series	Percentage Point Change	Direction
	Index	Index		
	Mar-18	Feb-18		
PMI	67.80	75.24	-7.4	growing
New Orders	64.88	64.85	0.0	growing
Production	64.55	82.10	-17.6	growing
Employment	78.19	77.21	1.0	growing
Supplier Deliveries	81.38	85.37	-4.0	slower
Inventories	50.00	66.67	-16.7	neutral
Customers' Inventories *	30.00	36.36	-6.4	declining
Prices *	88.24	86.67	1.6	growing
Backlog of Orders *	73.33	61.54	11.8	growing
Exports *	63.64	65.00	-1.4	growing
Imports *	75.00	66.67	8.3	growing

Blue and White-Collar Employment:

We have collected input on Blue and White Collar Employment. The indices are below for **January 2018, February 2018, and March 2018.**

	Diffusion Index Jan-18	Diffusion Index Feb-18	Diffusion Index March-18	Direction	Comments
Blue Collar	62.0	57.5	58.4	growing	-
White Collar	58.9	50.4	51.1	growing	-

Note: These have been calculated based on the seasonally adjusted (SA) Blue and White Collar indices.

What respondents are saying in March 2018:

- Labor is very tight and hard to keep people once hired in production jobs.
- Many firms are looking to hire
- Tightening labor markets pose a risk
- Challenges in retaining production workers

Buying Policy

Average commitment lead-time for Capital Expenditures decreased from 114 days to 108 days. Average lead-time for Production Materials increased from 46 days to 52 days. Average lead-time for Maintenance, Repair and Operating (MRO) Supplies decreased from 21 days to 19 days.

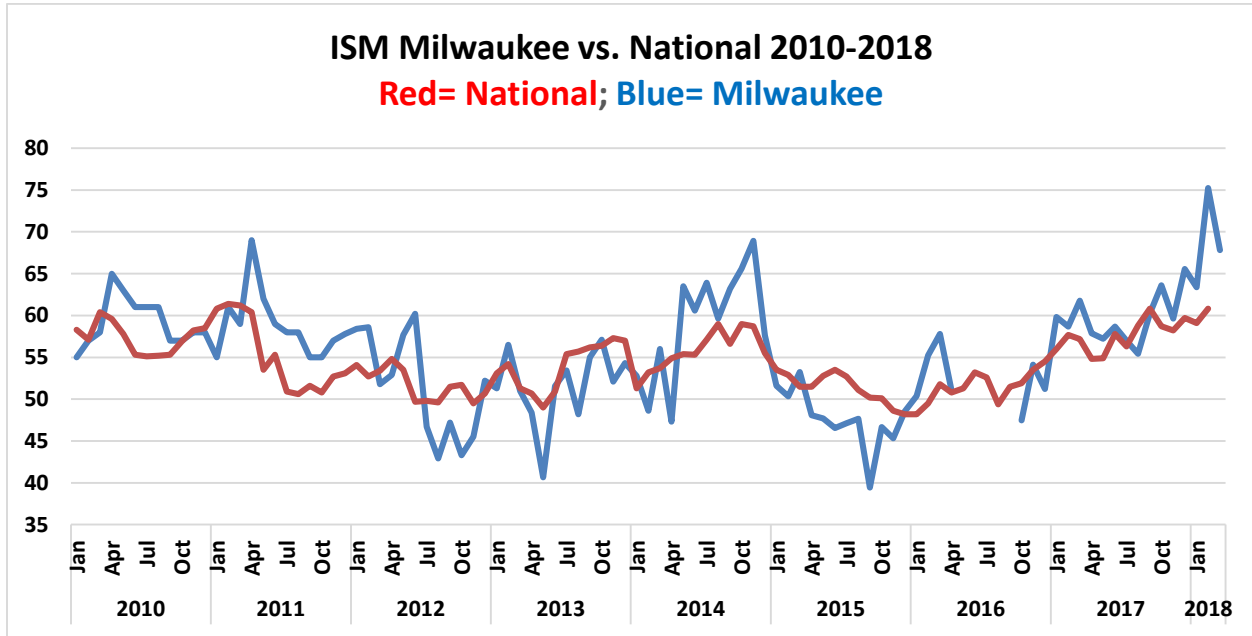
Six- Month Outlook on Business Conditions

In this outlook, there is an upward shift in positive expectations compared with January in terms of market conditions. Approximately 52.94% of respondents expect positive conditions, 35.29% expect conditions to remain the same and 11.76% of the respondents expect conditions to worsen within the next six months.

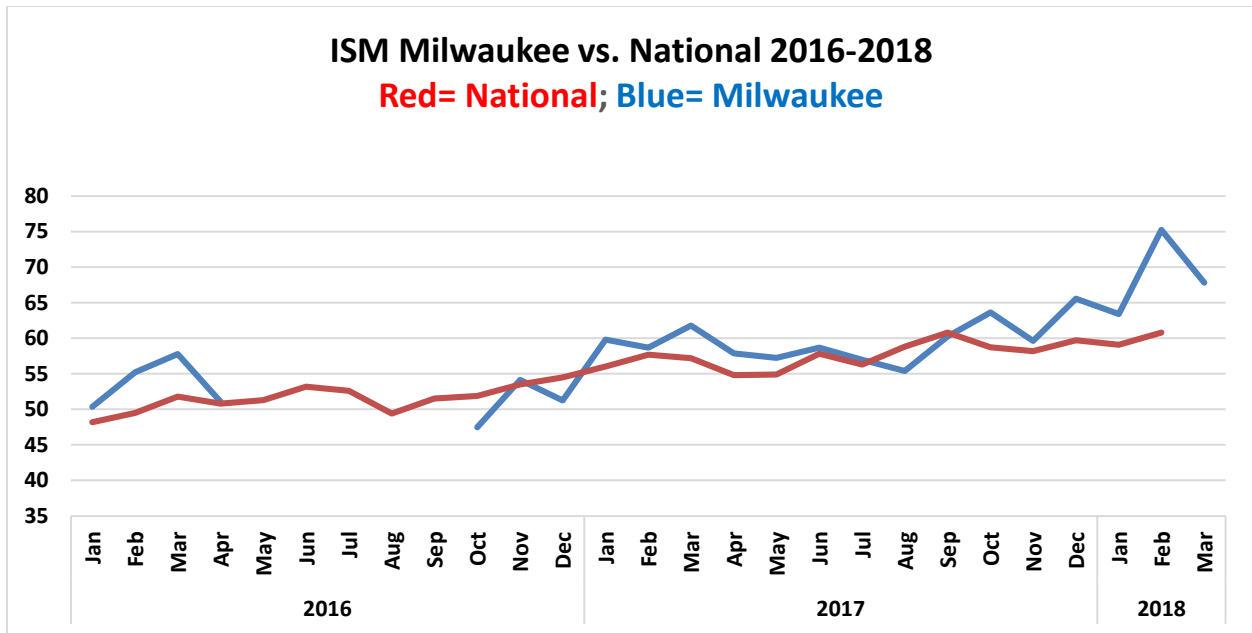
	Expect Positive Conditions	Expect Same Conditions	Expect Worse Conditions	Diffusion Index
Mar-18	52.94%	35.29%	11.76%	70.59%
Feb-18	73.33%	13.33%	13.33%	80.00%
Jan-18	65.00%	20.00%	15.00%	75.00%

Milwaukee versus the Nation –

January 2010 – March 2018 Graph



January 2016- March 2018 Graph



Insights on the ISM PMI from the National Organization:

ISM *Manufacturing Report On Business*[®] Background

In February 1982, the PMI was developed by the U.S. Department of Commerce (DOC) and ISM. The index, based on analytical work by the DOC, adjusts five components of the Institute's monthly survey — new orders, production, employment, supplier deliveries and inventories — for normal seasonal variations, applies equal weights to each and then calculates them into a single monthly index number.

An update of research originally done by Theodore S. Torda, the late economist for the DOC, shows a close parallel between growth in real Gross Domestic Product (GDP) and the PMI. The index can explain about 60 percent of the annual variation in GDP, with a margin of error that averaged $\pm .48$ percent during the last ten years. George McKittrick, an economist at the DOC, said "Not only does the PMI track well with the overall economy, but the indication provided by ISM data about how widespread changes are, complements analogous government series that show size and direction of change."

In January 1989, the Supplier Deliveries Index from the *Report* became a standard element of the DOC's Bureau of Economic Analysis Index of Leading Economic Indicators. The data was incorporated into the index from June 1976 forward. In January 1996, The Conference Board began compiling this index.

What Is a Diffusion Index?

Diffusion indexes have the properties of leading indicators and are convenient summary measures showing the prevailing direction of change. The percent response to the "Better," "Same" or "Worse" question is difficult to compare to prior periods. Therefore, the percentages are "diffused" for this purpose. A diffusion index takes those indicating "Better" and half of those indicating "Same" and adds the percentages. This effectively measures the bias toward a positive (above 50 percent) or negative index (below 50 percent). For example, if the response is 20 percent "Better," 70 percent "Same," and 10 percent "Worse," then the diffusion index would be 55 percent ($20\% + [0.50 \times 70\%]$). The data for each question is converted to a diffusion index and then seasonally adjusted.

For each index, a reading above 50 percent indicates expansion of an index, while a reading below 50 percent indicates it is generally declining. And a reading of 50 percent indicates "no change" from the previous month. Supplier Deliveries is an exception. A Supplier Deliveries Index above 50 percent indicates slower deliveries, and below 50 percent indicates faster deliveries.

(<https://www.instituteforsupplymanagement.org/files/ISMREPORT/ROBBroch08.pdf>)